

AIR, PESTICIDES, AND TOXICS 6TH FLOOR RECORDS CENTER INFILING / NEW FILE FORM

New File ☐

OR

Infiling ☒

Choose from the file types below:

AIR FACILITY:

- (☐) AR - Acid Rain
- (☐) CB - Confidential Business
- (☐) CO - Compliance
- (☐) EN - **Enforcement
- (☐) GE - General
- (☒) PE - Permit
- (☐) RA - Regulatory Applicability
- (☐) Other _____

TSCA:

- (☐) AH - Asbestos Hazard Emergency Response Act
- (☐) AS or AW - Asbestos or Asbestos Worker Protection
- (☐) CB - Confidential
- (☐) FI - Site Specific
- (☐) FO - Non Site Specific
- (☐) IM - **Section 5 & 8
- (☐) LB - **Lead
- (☐) PC - **PCB

** Extension of file type (if needed): (☐) ES - Enforcement Sensitive
(☐) DO - Docket Number

EPCRA/SARA (☐)**FIFRA** (☐)*EPA Registry I.D.*

Current FRS Number:
(Found in EnviroFacts)

110045624721

Facility Name & Physical Address:

NRG Texas Power LLC
W.A. Parish Electric Generating Station2500 Y.U. Jones Rd.Thompson, TX, 77481

Remarks:

Requestor's Name & Phone Number:

Les Kovar X6733

Bryan W. Shaw, Ph.D., *Chairman*
Carlos Rubinstein, *Commissioner*
Toby Baker, *Commissioner*
Zak Covar, *Executive Director*



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

October 26, 2012

Mr. Craig Eckberg
Senior Manager
NRG Texas Power, LLC
1201 Fannin Street, Suite 8000
Houston, Texas 77002

Re: Request for Discrete Emission Credit Use Approval
Flue Gas Carbon Capture Project
W.A. Parish Electric Generating Station

RECEIVED
12 NOV - 6 PM 4: 21
AIR PERMITS SECTION
6PD-R

Dear Mr. Eckberg:

This letter is in response to your request on September 27, 2012, to use nitrogen oxides (NO_x) discrete emission reduction credits (DERC) to satisfy the volatile organic compound (VOC) offset requirement associated with the Flue Gas Carbon Capture (FGCC) project planned for the W.A. Parish Electric Generation Station. The review of your request is complete. As allowed in 30 Texas Administrative Code §101.376(b)(2) and §101.372(a), program participants may use DERCs to meet New Source Review (NSR) offset requirements and use NO_x reductions to meet VOC reduction requirements if a demonstration is made to show that one pollutant may be substituted for another.

The submitted photochemical modeling, conducted by Alpine Geophysics, LLC, demonstrates that the use of a 1:1 NO_x to VOC inter-pollutant ratio for this FGCC project is conservative for this specific project. Based on this demonstration and the rules in §101.372(a), we approve the use of NO_x DERCs to offset VOC emission increases for this project at a ratio of 1:1, providing the special conditions in NSR permit number 98664 reference this ratio.

If the Texas Commission on Environmental Quality (TCEQ) establishes a different NO_x to VOC ratio in the future that can be applied to this FGCC project, you may submit a request to alter NSR permit number 98664 and revise the 1:1 ratio. Any request to revise the ratio in the permit must receive approval from the TCEQ and the United States Environmental Protection Agency. Any final change to the 1:1 ratio would not be applicable to DERCs already used at a 1:1 ratio and would thus be prospective only in nature.

Any DERCs set aside in NSR permit number 98664 that are no longer needed to satisfy the VOC offset requirement due to a revision of the ratio, will be returned to NRG Texas Power, LLC, for future use. Future rulemaking may affect the value or potential use of any returned credits.

The 1:1 inter-pollutant ratio, the DERC certificate(s), and credit amount needed to satisfy NSR offset requirements must be referenced in the special conditions of NSR permit number 98664. This process ensures that the ratio and credits set aside will remain valid and available for use for the duration of this FGCC project (an estimated 30-year period).


Mr. Craig Eckberg

Page 2

October 26, 2012

If you have any questions regarding this matter or need further assistance regarding the banking program, please contact Mr. Daniel Banda at (512) 239-4701 or by e-mail at daniel.banda@tceq.texas.gov.

Sincerely,

A handwritten signature in black ink, appearing to read "David Brymer", written over a horizontal line.

David Brymer, Director
Air Quality Division

DB/db

cc: Mr. Scott Mathias, Associate Director, Air Quality Policy Division, US EPA
Mr. Carl Edlund, PE, Director, Multimedia Planning and Permitting Division, US EPA



NRG Energy, Inc.
211 Carnegie Center
Princeton, NJ 08540

November 2, 2012

BY HAND DELIVERY

Mr. Zak Covar, Executive Director
Texas Commission on Environmental Quality
MC 109
P.O. Box 13087
Austin TX 78711-3087

Dear Mr. Covar:

NRG Texas Power LLC (NRG) plans to undertake authorized maintenance on Unit 8 of the W.A. Parish Electric Generating Station (the "Plant").¹ Pursuant to 30 Tex. Admin. Code § 116.127 and 40 C.F.R. §§ 52.21(r)(6), 52.2305, NRG hereby gives notice that the maintenance activity described in this letter is not subject to major New Source Review ("NSR") permitting requirements.

Maintenance Activity Description

NRG will replace portions of the water/steam cycle tubing at Unit 8 of the Plant, which is located in Fort Bend County, Texas. This maintenance activity is expected to begin on Saturday, November 3, 2012, and is expected to conclude before December 31, 2012.

The only facility affected by the activity is Unit 8 at the Plant.

Description of the NSR Applicability Tests

The applicability tests used to determine that the maintenance activity is not a major modification for any pollutant include, but are not limited to, the description below.

Unit 8 is not expected to experience a "significant project emissions increase." Emissions from the unit are a function of utilization and heat input. Due to market factors, utilization of the unit (which burns a combination of coal and natural gas) is not expected to exceed the utilization over the representative periods for the past 5 years. The unit's baseline actual emissions, the maximum 24-month annual average emissions of each relevant pollutant over the past 5 years, are as follows: 1061.62 tons NO_x, from December 2007 through November 2009; 3184.72 tons SO₂, from November 2007 through October 2009; 1999.15 tons CO, from October 2009 through September 2011; 528.30 tons PM₁₀, from December 2007 through November 2009; 31.47 tons VOC, from February 2008 through January 2010; 0.08 tons lead, from December 2007 through November 2009; and 5,216,127.30 tons CO₂, from December 2007 through November 2009. Because utilization and heat input are not expected to exceed the

¹ CN603203218, RN100888312.

rates experienced during these time periods, emissions also are not expected to exceed the corresponding levels. Further, because the maintenance activity will not change the unit's maximum heat input or availability compared to the past 5 years, any such changes in the future will be unrelated to the maintenance activity. Thus, there will be no "project emissions increase" under 30 Tex. Admin. Code § 116.12(30)(A) or the corresponding federal regulations.

Conclusion

The Unit 8 maintenance activity qualifies for exclusion from the major NSR and minor NSR permitting programs. NRG will submit reports of the unit's annual emissions within 60 days after the end of each of the next 5 calendar years (2013, 2014, 2015, 2016, and 2017) as described in 30 Tex. Admin. Code § 116.127(c) and 40 C.F.R. § 52.21(r)(6)(iv).

If you have questions, please contact me at 713.537.2146 or craig.eckberg@nrgenergy.com.

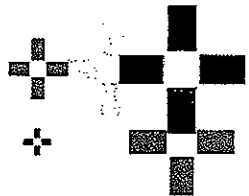
Sincerely,

B. C. Carmine

for Craig Eckberg
Senior Manager, Environmental Business
NRG Texas Power

cc: U.S. EPA Region 6
1445 Ross Avenue, Suite 1200
Dallas, TX 75202-2733
Attention: Jeff Robinson, Chief, Air Permits Section

Mike Wilson, Air Permits Director, TCEQ



RECEIVED
12 NOV -6 PM 1:21
AIR PERMITS SECTION
6PD-R

NRG Energy, Inc.
211 Carnegie Center
Princeton, NJ 08540

November 2, 2012

BY HAND DELIVERY

Mr. Zak Covar, Executive Director
Texas Commission on Environmental Quality
MC 109
P.O. Box 13087
Austin TX 78711-3087

Dear Mr. Covar:

NRG Texas Power LLC (NRG) plans to undertake authorized maintenance on Unit 8 of the W.A. Parish Electric Generating Station (the "Plant").¹ Pursuant to 30 Tex. Admin. Code § 116.127 and 40 C.F.R. §§ 52.21(r)(6), 52.2305, NRG hereby gives notice that the maintenance activity described in this letter is not subject to major New Source Review ("NSR") permitting requirements.

Maintenance Activity Description

NRG will replace portions of the water/steam cycle tubing at Unit 8 of the Plant, which is located in Fort Bend County, Texas. This maintenance activity is expected to begin on Saturday, November 3, 2012, and is expected to conclude before December 31, 2012.

The only facility affected by the activity is Unit 8 at the Plant.

Description of the NSR Applicability Tests

The applicability tests used to determine that the maintenance activity is not a major modification for any pollutant include, but are not limited to, the description below.

Unit 8 is not expected to experience a "significant project emissions increase." Emissions from the unit are a function of utilization and heat input. Due to market factors, utilization of the unit (which burns a combination of coal and natural gas) is not expected to exceed the utilization over the representative periods for the past 5 years. The unit's baseline actual emissions, the maximum 24-month annual average emissions of each relevant pollutant over the past 5 years, are as follows: 1061.62 tons NO_x, from December 2007 through November 2009; 3184.72 tons SO₂, from November 2007 through October 2009; 1999.15 tons CO, from October 2009 through September 2011; 528.30 tons PM₁₀, from December 2007 through November 2009; 31.47 tons VOC, from February 2008 through January 2010; 0.08 tons lead, from December 2007 through November 2009; and 5,216,127.30 tons CO₂, from December 2007 through November 2009. Because utilization and heat input are not expected to exceed the

¹ CN603203218, RN100888312.

rates experienced during these time periods, emissions also are not expected to exceed the corresponding levels. Further, because the maintenance activity will not change the unit's maximum heat input or availability compared to the past 5 years, any such changes in the future will be unrelated to the maintenance activity. Thus, there will be no "project emissions increase" under 30 Tex. Admin. Code § 116.12(30)(A) or the corresponding federal regulations.

Conclusion

The Unit 8 maintenance activity qualifies for exclusion from the major NSR and minor NSR permitting programs. NRG will submit reports of the unit's annual emissions within 60 days after the end of each of the next 5 calendar years (2013, 2014, 2015, 2016, and 2017) as described in 30 Tex. Admin. Code § 116.127(c) and 40 C.F.R. § 52.21(r)(6)(iv).

If you have questions, please contact me at 713.537.2146 or craig.eckberg@nrgenergy.com.

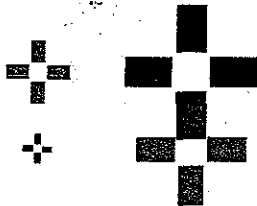
Sincerely,

B. C. Carmine

for Craig Eckberg
Senior Manager, Environmental Business
NRG Texas Power

cc: U.S. EPA Region 6
1445 Ross Avenue, Suite 1200
Dallas, TX 75202-2733
Attention: Jeff Robinson, Chief, Air Permits Section

Mike Wilson, Air Permits Director, TCEQ



NRG Texas Power LLC
1201 Fannin
Houston, Tx 77002

January 18, 2013

Mr. Zak Covar, Executive Director
Texas Commission on Environmental Quality
MC 109
P.O. Box 13087
Austin TX 78711-3087

Dear Mr. Covar:

NRG Texas Power LLC (NRG) plans to undertake authorized maintenance on Unit 7 of the W.A. Parish Electric Generating Station (the "Plant").¹ Pursuant to 30 Tex. Admin. Code § 116.127 and 40 C.F.R. §§ 52.21(r)(6), 52.2305, NRG hereby gives notice that the maintenance activity described in this letter is not subject to major New Source Review ("NSR") permitting requirements.

Maintenance Activity Description

NRG will replace portions of the water/steam cycle tubing at Unit 7 of the Plant, which is located in Fort Bend County, Texas. This maintenance activity is expected to begin on Saturday, January 19, 2013, and is expected to conclude before February 28, 2013. The only facility affected by the activity is Unit 7 at the Plant.

Description of the NSR Applicability Tests

The applicability tests used to determine that the maintenance activity is not a major modification for any pollutant include, but are not limited to, the description below.

Unit 7 is not expected to experience a "significant project emissions increase." Emissions from the unit are a function of utilization and heat input. Due to market factors, utilization of the unit (which burns a combination of coal and natural gas) is not expected to exceed the utilization over the representative periods for the past 5 years. The unit's baseline actual emissions, the maximum 24-month annual average emissions of each relevant pollutant over the alternate baseline, are as follows: 941.70 tons NO_x, from October 2009 through September 2011; 13,961.47 tons SO₂, from May 2008 through April 2010; 1,688.89 tons CO, from May 2008 through April 2010; 257.91 tons PM₁₀, from May 2008 through April 2010; 31.44 tons VOC, from May 2008 through April 2010; 0.02 tons lead, from May 2008 through April 2010; and 4,380,272 tons CO₂, from May 2008 through April 2010. Because utilization and heat input are not expected to exceed the rates experienced during these time periods, emissions also are not expected to exceed the corresponding levels. Further, because the maintenance activity will not change the unit's maximum heat input or availability compared to the past 5 years, any such changes in the future will be unrelated to the maintenance activity. Thus, there will be no "project emissions increase" under 30 Tex. Admin. Code § 116.12(30)(A) or the corresponding federal regulations.

NRG requests approval of an alternate 5-year baseline for Unit 7 due to abnormal operations during 2012. As provided in the attached chart, Unit 7 did not operate during

¹ CN603207218, RN100888312.

RECEIVED
13 JAN 23 11:17
AIR PERMITTING
6002

the first six weeks of 2012, primarily due to historically low domestic natural gas prices during that brief period. For this reason, NRG believes that 2012 is not a representative year to be included in the 5-year baseline and we respectfully request written concurrence approving use of the 2007 to 2011 alternate baseline for Unit 7.

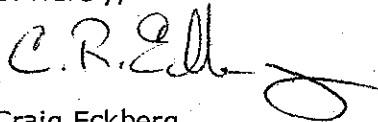
The unit's alternate baseline actual emissions, the maximum 24-month annual average emissions of each relevant pollutant over the alternate baseline, are as follows: 941.70 tons NOx, from October 2009 through September 2011; 15,909.55 tons SO2, from January 2007 through December 2008; 1,843.79 tons CO, from April 2007 through March 2009; 267.79 tons PM10, from January 2007 through December 2009; 31.44 tons VOC, from May 2008 through April 2010; 0.02 tons lead, from January 2007 through December 2008; and 4,543,283 tons CO2, from January 2007 through December 2008. Because utilization and heat input are not expected to exceed the rates experienced during these time periods, emissions also are not expected to exceed the corresponding levels. Further, because the maintenance activity will not change the unit's maximum heat input or availability compared to this alternate 5-year baseline period, any such changes in the future will be unrelated to the maintenance activity. Thus, there will be no "project emissions increase" under 30 Tex. Admin. Code § 116.12(30)(A) or the corresponding federal regulations.

Conclusion

The Unit 7 maintenance activity qualifies for exclusion from the major NSR and minor NSR permitting programs. NRG will submit reports of the unit's annual emissions within 60 days after the end of each of the next 5 calendar years (2013, 2014, 2015, 2016, 2017 and 2018) as described in 30 Tex. Admin. Code § 116.127(c) and 40 C.F.R. § 52.21(r)(6)(iv).

Please provide written concurrence approving the use of the 2007 to 2011 alternate baseline period. If you have questions, please contact me at craig.eckberg@nrgenergy.com or 713.537.2146.

Sincerely,

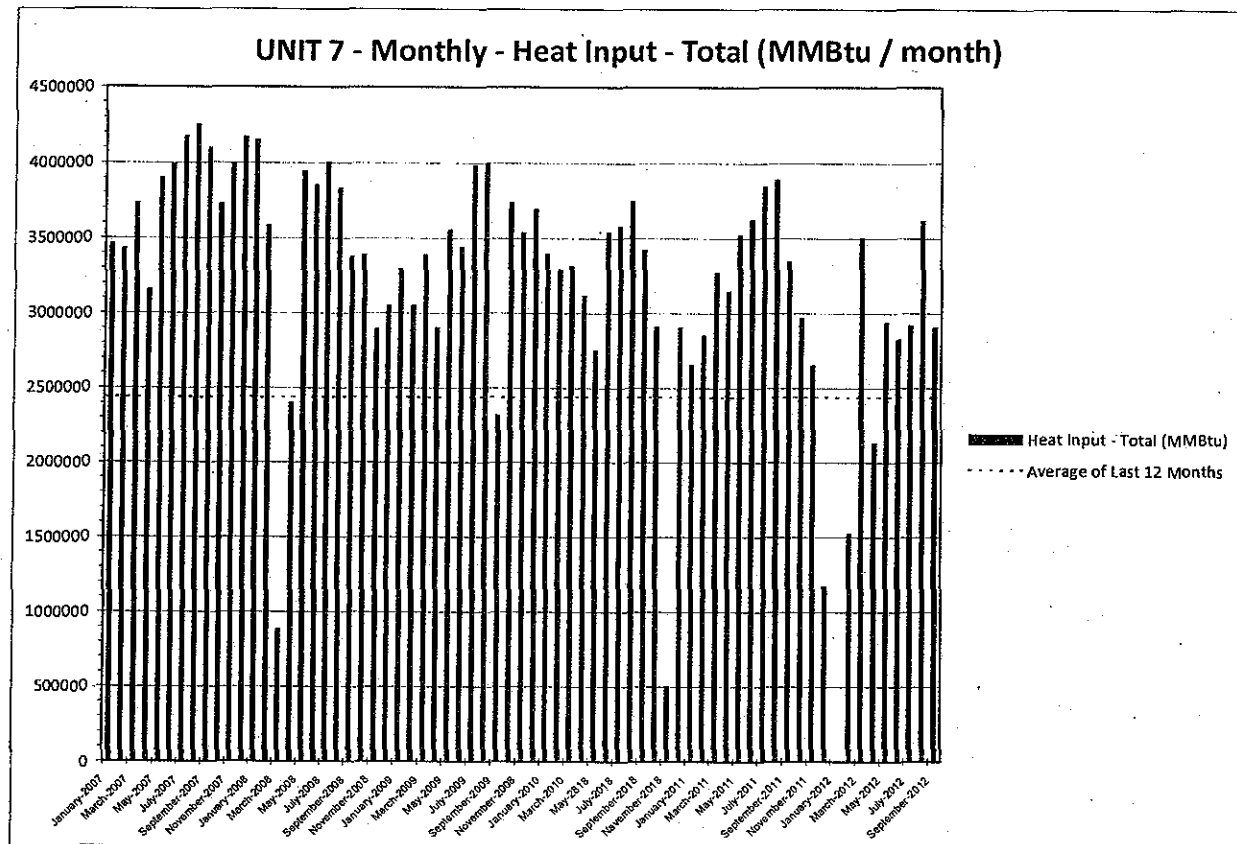


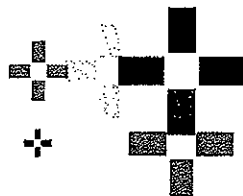
Craig Eckberg
Senior Manager, Environmental Business
NRG Texas Power

cc: U.S. EPA Region 6
1445 Ross Avenue, Suite 1200
Dallas, TX 75202-2733
Attention: Jeff Robinson, Chief, Air Permits Section

Mike Wilson, Air Permits Director, TCEQ Austin

Unit 7 Monthly Heat Input
2007 to 2012





RECEIVED

13 JAN 18 PM 4: 26

AIR PERMITS SECTION
6PD-R

NRG Texas Power LLC
1201 Fannin
Houston, Tx 77002

January 18, 2013

Mr. Zak Covar, Executive Director
Texas Commission on Environmental Quality
MC 109
P.O. Box 13087
Austin TX 78711-3087

Dear Mr. Covar:

NRG Texas Power LLC (NRG) plans to undertake authorized maintenance on Unit 7 of the W.A. Parish Electric Generating Station (the "Plant").¹ Pursuant to 30 Tex. Admin. Code § 116.127 and 40 C.F.R. §§ 52.21(r)(6), 52.2305, NRG hereby gives notice that the maintenance activity described in this letter is not subject to major New Source Review ("NSR") permitting requirements.

Maintenance Activity Description

NRG will replace portions of the water/steam cycle tubing at Unit 7 of the Plant, which is located in Fort Bend County, Texas. This maintenance activity is expected to begin on Saturday, January 19, 2013, and is expected to conclude before February 28, 2013. The only facility affected by the activity is Unit 7 at the Plant.

Description of the NSR Applicability Tests

The applicability tests used to determine that the maintenance activity is not a major modification for any pollutant include, but are not limited to, the description below.

Unit 7 is not expected to experience a "significant project emissions increase." Emissions from the unit are a function of utilization and heat input. Due to market factors, utilization of the unit (which burns a combination of coal and natural gas) is not expected to exceed the utilization over the representative periods for the past 5 years. The unit's baseline actual emissions, the maximum 24-month annual average emissions of each relevant pollutant over the alternate baseline, are as follows: 941.70 tons NOx, from October 2009 through September 2011; 13,961.47 tons SO₂, from May 2008 through April 2010; 1,688.89 tons CO, from May 2008 through April 2010; 257.91 tons PM₁₀, from May 2008 through April 2010; 31.44 tons VOC, from May 2008 through April 2010; 0.02 tons lead, from May 2008 through April 2010; and 4,380,272 tons CO₂, from May 2008 through April 2010. Because utilization and heat input are not expected to exceed the rates experienced during these time periods, emissions also are not expected to exceed the corresponding levels. Further, because the maintenance activity will not change the unit's maximum heat input or availability compared to the past 5 years, any such changes in the future will be unrelated to the maintenance activity. Thus, there will be no "project emissions increase" under 30 Tex. Admin. Code § 116.12(30)(A) or the corresponding federal regulations.

NRG requests approval of an alternate 5-year baseline for Unit 7 due to abnormal operations during 2012. As provided in the attached chart, Unit 7 did not operate during

¹ CN603207218, RN100888312.

the first six weeks of 2012, primarily due to historically low domestic natural gas prices during that brief period. For this reason, NRG believes that 2012 is not a representative year to be included in the 5-year baseline and we respectfully request written concurrence approving use of the 2007 to 2011 alternate baseline for Unit 7.

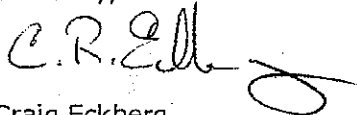
The unit's alternate baseline actual emissions, the maximum 24-month annual average emissions of each relevant pollutant over the alternate baseline, are as follows: 941.70 tons NOx, from October 2009 through September 2011; 15,909.55 tons SO2, from January 2007 through December 2008; 1,843.79 tons CO, from April 2007 through March 2009; 267.79 tons PM10, from January 2007 through December 2009; 31.44 tons VOC, from May 2008 through April 2010; 0.02 tons lead, from January 2007 through December 2008; and 4,543,283 tons CO2, from January 2007 through December 2008. Because utilization and heat input are not expected to exceed the rates experienced during these time periods, emissions also are not expected to exceed the corresponding levels. Further, because the maintenance activity will not change the unit's maximum heat input or availability compared to this alternate 5-year baseline period, any such changes in the future will be unrelated to the maintenance activity. Thus, there will be no "project emissions increase" under 30 Tex. Admin. Code § 116.12(30)(A) or the corresponding federal regulations.

Conclusion

The Unit 7 maintenance activity qualifies for exclusion from the major NSR and minor NSR permitting programs. NRG will submit reports of the unit's annual emissions within 60 days after the end of each of the next 5 calendar years (2013, 2014, 2015, 2016, 2017 and 2018) as described in 30 Tex. Admin. Code § 116.127(c) and 40 C.F.R. § 52.21(r)(6)(iv).

Please provide written concurrence approving the use of the 2007 to 2011 alternate baseline period. If you have questions, please contact me at craig.eckberg@nrgenergy.com or 713.537.2146.

Sincerely,



Craig Eckberg
Senior Manager, Environmental Business
NRG Texas Power

cc: U.S. EPA Region 6
1445 Ross Avenue, Suite 1200
Dallas, TX 75202-2733
Attention: Jeff Robinson, Chief, Air Permits Section

Mike Wilson, Air Permits Director, TCEQ Austin

Unit 7 Monthly Heat Input
2007 to 2012

